



# Health Care Financing Notes

Medicare: Use of Hospital  
Outpatient Services, 1974-1977

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Published by the Health Care Financing Administration

# Health Care Financing Notes

*Health Care Financing Notes* are published periodically by the Health Care Financing Administration's Office of Research, Demonstrations, and Statistics.

The Health Care Financing Administration was established in March 1977 to combine HEW's health financing and quality assurance programs into a single agency. HCFA is responsible for the operation of the Medicare and Medicaid programs, the PSRO program, Federal survey and certification efforts, and a variety of health care quality assurance activities.

The mission of the Health Care Financing Administration is to promote the timely delivery of appropriate, quality health care to its beneficiaries—approximately 45 million aged, disabled, and poor Americans. HCFA is committed to making beneficiaries aware of the services for which they are eligible, promoting the accessibility of those services and ensuring that HCFA policies and actions promote efficiency and quality within the total health care delivery system.

HCFA's Office of Research, Demonstrations, and Statistics (ORDS) conducts studies and projects that demonstrate and evaluate optional reimbursement, coverage, eligibility, and management alternatives to the present Federal programs. ORDS also assesses the impact of HCFA programs on health care costs, program expenditures, beneficiary access to services, health care providers, and the health care industry. In addition, ORDS monitors national health care expenditures and prices and provides actuarial analyses on the costs of current HCFA programs as well as the impact of possible legislative or administrative changes in the programs.

The purpose of the *Health Care Financing Notes* is to provide the public with descriptive program data or information as soon as it becomes available. Data is presented here in a brief, concise format. Frequently a more comprehensive analysis of the data may be available at a later time in one of the Health Care Financing Administration's other publications.

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# Medicare: Use of Hospital Outpatient Services, 1974-1977

This Note shows for the first time, data on the use of hospital outpatient services by aged and disabled Medicare beneficiaries from 1974-1977. Covered charges and reimbursements for hospital outpatient services are also shown for 1977 by the State of residence. Hospital outpatient services are the main component of Medicare outpatient services. In 1977, for example, hospital outpatient reimbursements represented 75 percent of all outpatient reimbursements.

To illustrate the growth in outpatient benefits since the start of the Medicare program total outpatient reimbursements are shown for 1967-1977. Outpatient reimbursements increased at a faster rate than any other Medicare benefit (such as inpatient hospital benefits.). In July 1973, Medicare coverage was extended to the disabled and to persons with end-stage renal disease (ESRD). The addition of ESRD beneficiaries sharply increased outpatient reimbursements.

Outpatient figures are shown only for persons who were *reimbursed*. In contrast, hospital outpatient figures show users of covered services whether or not they are reimbursed.

Highlights of the data follow:

## Growth In Outpatient Services

### Number of Persons and Amounts Reimbursed, 1967-1977

#### Aged

- Reimbursements to the aged increased from \$38 million in 1967 to \$649 million in 1977 (figure 1). The average annual rate of increase of outpatient reimbursements to the aged was 32 percent.
- The proportion of aged beneficiaries reimbursed for outpatient services increased from 84 per 1,000 beneficiaries in 1967 to 214 per 1,000 in 1977, an average annual increase of 10 percent (figure 2).

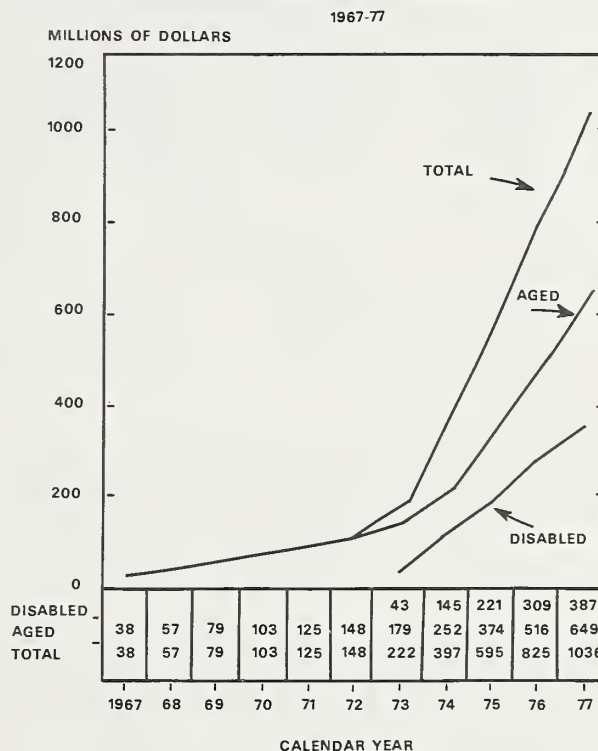
### Number of Persons and Amounts Reimbursed, 1974-1977

#### Disabled

- Outpatient reimbursements to the disabled (including those eligible solely because of end-stage renal disease) increased from \$145 million in 1974 to \$387 million in 1977. The average annual rate of increase was 39 percent (figure 1).

Prepared by Martin Ruther, Office of Research, Demonstrations, and Statistics, Health Care Financing Administration. The computer program to tabulate the data was prepared by Marilyn Newton. The standard errors of estimates were prepared by James Beebe.

FIG. 1 OUTPATIENT SERVICES UNDER MEDICARE:  
REIMBURSEMENTS OF THE AGED AND DISABLED



- The proportion of disabled persons reimbursed for outpatient services increased from 170 per 1,000 beneficiaries in 1974 to 260 per 1,000 in 1977 or an average annual increase of 15 percent (figure 2).
- In each of the years 1974-1977, the proportion of disabled persons reimbursed for outpatient services was higher than that of the aged. In 1976 (latest year available), the rate for the disabled was 238 persons per 1,000 beneficiaries compared to 196 persons per 1,000 beneficiaries for the aged.

## Hospital Outpatient Services

### Charges and Reimbursements, 1974-1977

#### Aged

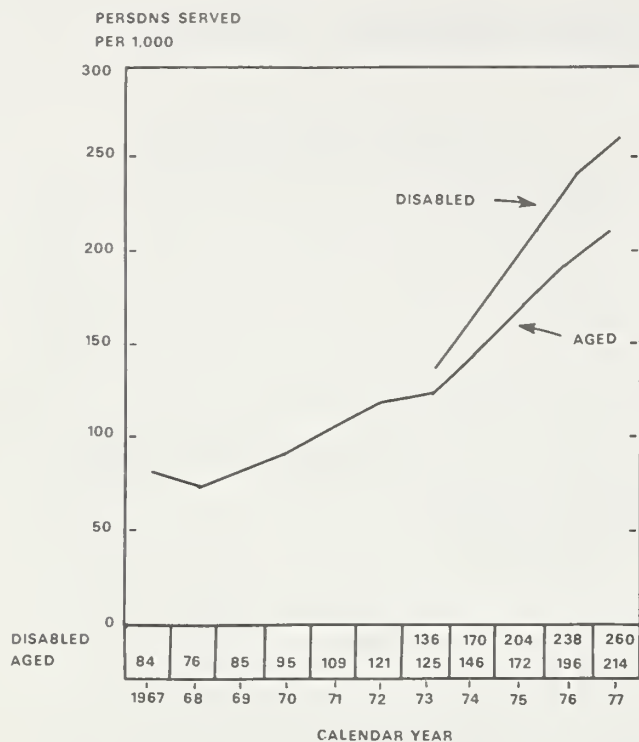
- Covered charges incurred by the aged increased from \$395 million in 1974 to \$855 million in 1977, an increase of 117 percent (table A).
- In the same period, reimbursements to the aged rose from \$221 million to \$540 million, an increase of 145 percent. Reimbursements rose more rapidly than charges as an increasing proportion of beneficiaries exceeded the supplementary medical insurance (SMI) deductible (table A).



FIG. 2 OUTPATIENT SERVICES UNDER MEDICARE:

PERSONS SERVED PER 1,000 BENEFICIARIES

1967-77



- Average charges per aged beneficiary rose 102 percent—from \$18.42 in 1974 to \$37.21 in 1977. During the same period, reimbursements per beneficiary went up even more—128 percent—from \$10.30 to \$23.49 (table A).
- The ratio of reimbursements to charges rose from 55.9 to 63.1 percent (table A).

#### Disabled

- Covered charges incurred by the disabled increased from \$141 million in 1974 to \$320 million in 1977—an increase of 128 percent. The major portion of these charges—60 percent—were incurred by beneficiaries with end-stage renal disease (table A).
- Reimbursements for hospital outpatient services to disabled beneficiaries rose from \$103 million in 1974 to \$233 million in 1977—an increase of 127 percent. In 1977, reimbursement for ESRD beneficiaries was \$149 million, 64 percent of the total (table A).
- The proportion of reimbursement for hospital outpatient services to reimbursement for all outpatient services was 60 percent for the disabled compared to 83 percent for the aged in 1977. The lower ratio of the disabled reflected reimbursements made for dialysis services to ESRD beneficiaries in nonhospital settings.

### Reimbursement and Enrollment, 1977

#### Aged

- Of the \$773 million reimbursed by Medicare for hospital outpatient services in 1977, 70 percent was for the aged. This group represented 91 percent of SMI beneficiaries.

#### Disabled

- In contrast, 19 percent of the reimbursements were for persons with ESRD who represented only 0.1 percent or 30,000 of SMI beneficiaries. Those disabled persons without ESRD received 11 percent of hospital outpatient reimbursements and represented 9 percent (2.4 million) of the total SMI population.

### Reimbursement by Residence of Beneficiary

#### Aged

- The average reimbursement per aged beneficiary in the U.S. was \$24 in 1977. The highest average was among residents from the West, \$33, and the lowest was from the South, \$16 (table 1).
- Twenty-five percent of aged SMI beneficiaries living in the Northeast accounted for 32 percent of reimbursements. The figures were reversed in the South: 32 percent of aged beneficiaries accounted for 22 percent of hospital outpatient reimbursements (table B).
- Massachusetts, an urban State, had the highest average reimbursement per beneficiary, \$45. South Dakota, a rural State, had the lowest average reimbursement, \$9.
- The ratio of reimbursements to charges among the aged averaged 63.1 percent for all areas. In the United States, reimbursement rates varied from 70.7 percent in California to 44.6 percent in West Virginia.

#### Disabled Excluding ESRD Beneficiaries

- The average reimbursement in the United States per disabled beneficiary for hospital outpatient services was \$36. This is 53 percent more than the average reimbursement for the aged (table 2). ESRD beneficiaries have been excluded from table 2 to avoid distortion of average charges and reimbursements in States with ESRD users and relatively few disabled users of hospital outpatient services.
- Regional differences varied more for the disabled than for the aged. The average reimbursement per disabled beneficiary living in the West was \$59, while in the South it was \$24.
- The West with only 17 percent of disabled beneficiaries, accounted for almost 28 percent of the reimbursements for hospital outpatient services in the U.S. (table B). Similarly, for the Northeast, the figures were 22 and 27 percent, respectively. The South with 37 percent of the SMI population received only 25 percent of the reimbursements for hospital outpatient services.
- California residents received the highest reimbursement per disabled beneficiary—\$74. Louisiana and Kentucky residents received the lowest reimbursement, \$12 per beneficiary. In outlying areas, Puerto Rico residents had reimbursements of only \$5 per beneficiary (table 2).
- The proportion of reimbursements to covered charges for the disabled averaged 65.2 percent. These rates varied in the United States from 71.1 percent in Nevada to 46.2 in West Virginia (table 2).

**Table A**  
**Use of Hospital Outpatient Services by the Aged and Disabled: Covered Charges and Reimbursement, 1974-1977**

Year Service Incurred	Covered Charges	Amount	Reimbursement Per Beneficiary <sup>1</sup>	As Percent of Charges
All Aged and Disabled				
1974	\$535,296	\$323,383	\$13.96	60.4
1975	747,518	469,875	19.66	63.0
1976	974,708	630,323	25.61	64.7
1977	1,175,878	773,490	30.50	65.8
Percent Change 1974-77	120	139	118	9
Aged				
1974	\$394,680	\$220,742	\$10.30	55.9
1975	546,095	323,563	14.74	59.3
1976	704,569	432,971	19.29	61.5
1977	855,412	540,040	23.49	63.1
Percent change 1974-77	117	145	128	13
Disabled				
1974	\$140,617	\$102,641	\$57.07	70.8
1975	201,423	146,312	74.69	72.6
1976	270,139	197,352	91.03	73.1
1977	320,466	233,450	98.38	72.8
Percent change 1974-77	128	127	72	3
Disabled Excluding End-stage Renal Disease				
1974	\$ 44,210	\$ 26,962	\$15.54	61.0
1975	67,919	42,106	21.62	62.0
1976	99,978	64,169	29.78	64.2
1977	129,367	84,294	35.76	65.2
Percent Change 1974-77	193	213	130	7
Disabled With End-stage Renal Disease				
1974	\$ 96,407	\$ 75,679	NA	78.5
1975	133,504	104,206	NA	78.1
1976	170,161	133,183	NA	78.3
1977	191,099	149,156	NA	78.1
Percent Change 1974-77	98	97	NA	-1

<sup>1</sup>Supplemental medical insurance enrollment as of July 1.

## Source and Limitations of Data

The hospital outpatient data in this *Note* were derived from a 5 percent sample of persons enrolled for supplementary medical insurance. Counts were multiplied by 20 to estimate total data. Data for 1977, for example, were taken from bills for services performed in hospital outpatient departments during that year. Data in the Health Care Financing Administration's central records as of December 1978, indicated that about 97 percent of reimbursements were recorded. Payments for hospital outpatient services shown in this report are based on interim rates that may be adjusted after the end of the

hospital's accounting year, based on reasonable costs of operations. SMI enrollment counts in this report are as of July 1 for each year.

## Standard Error Tables

Tables 3 and 4 show approximate standard errors for estimates in this report. The standard error is primarily a measure of sampling variability, that is the variation that occurs by chance because a sample rather than the whole population is used. Approximate methods were used to calculate standard errors at a reasonable cost. Thus, these tables indicate only the order of magnitude of the standard

errors for specific estimates. In general, estimates for small subgroups and percentages or means with small bases tend to be relatively unreliable.

## Definitions

**Outpatient Services**—These are hospital and nonhospital outpatient services covered by Medicare.

Two types of outpatient services are covered: diagnostic and therapeutic.

Diagnostic services are examinations or tests to aid in assessing medical conditions or to identify diseases. This includes the services of nurses, psychologists, and technicians, drugs needed for diagnosis, and the use of supplies and equipment.

Therapeutic services are those that aid physicians in treating patients and must pertain to physician's services. Services include the use of hospital facilities, such as clinic and emergency rooms, the services of various hospital personnel, speech and physical therapy services and medical supplies and medical devices. Excluded are charges by physicians except in rare cases when physicians elect to have the hospital bill for them.

**Table 1**  
**Use of Hospital Outpatient Services by the Aged: Covered Charges and Reimbursements, by Residence, 1977<sup>1</sup>**  
(Dollar Amounts in Thousands)

Area of Residence	Covered Charges	Reimbursement		
		Amount	Per Beneficiary	Percent of Charges
All areas	\$855,412	\$540,040	\$23.49	63.1
United States <sup>2</sup>	853,296	538,728	23.61	63.1
<i>Regions</i>				
Northeast	278,364	173,311	30.91	62.3
North Central	208,879	125,870	20.28	60.3
South	188,738	116,557	16.05	61.8
West	177,315	122,990	33.09	69.4
<i>Divisions</i>				
New England	75,676	49,875	35.66	65.9
Middle Atlantic	202,688	123,436	29.34	60.9
East North Central	148,810	88,726	21.42	59.6
West North Central	60,069	37,144	17.99	61.8
South Atlantic	112,665	70,004	19.17	62.1
East South Central	31,489	18,657	12.66	59.2
West South Central	44,584	27,896	13.05	62.6
Mountain	33,844	22,316	25.05	65.9
Pacific	143,471	100,674	35.63	70.2
<i>States</i>				
New England:				
Maine	7,039	3,956	29.84	56.2
New Hampshire	2,998	1,853	19.83	61.8
Vermont	1,745	1,085	19.82	62.2
Massachusetts	44,643	30,411	45.30	68.1
Rhode Island	5,540	3,699	31.99	66.8
Connecticut	13,711	8,871	26.80	64.7
Middle Atlantic:				
New York	107,339	66,286	32.69	61.8
New Jersey	32,065	21,548	27.44	67.2
Pennsylvania	63,284	35,602	25.53	56.3
East North Central:				
Ohio	31,874	19,515	18.21	61.2
Indiana	18,235	11,209	20.82	61.5
Illinois	39,095	23,802	20.50	60.9
Michigan	43,001	25,085	29.77	58.3
Wisconsin	16,605	9,115	17.25	54.9



**Table 1 (Continued)**  
**Use of Hospital Outpatient Services by the Aged: Covered Charges and Reimbursements, by Residence, 1977<sup>1</sup>**  
**(Dollar Amounts in Thousands)**

Area of Residence	Covered Charges	Reimbursement		
		Amount	Per Beneficiary	Percent of Charges
West North Central:				
Minnesota	\$ 16,327	\$ 10,582	\$23.54	64.8
Iowa	10,908	6,758	18.30	62.0
Missouri	16,449	9,396	15.61	57.1
North Dakota	1,619	1,019	13.44	62.9
South Dakota	1,301	788	9.16	60.6
Nebraska	4,496	2,721	13.93	60.5
Kansas	8,969	5,881	20.50	65.6
South Atlantic:				
Delaware	1,871	1,158	21.87	61.9
Maryland	15,192	9,568	28.25	63.0
District of Columbia	4,053	2,799	43.24	69.1
Virginia	13,298	8,458	19.61	63.6
West Virginia	6,208	2,767	12.74	44.6
North Carolina	13,587	7,330	14.18	53.9
South Carolina	6,101	3,253	13.50	53.3
Georgia	15,115	9,584	21.64	63.4
Florida	37,240	25,087	18.63	67.4
East South Central:				
Kentucky	7,441	4,029	10.74	54.1
Tennessee	11,122	6,833	15.00	61.4
Alabama	8,190	5,015	12.98	61.2
Mississippi	4,736	2,780	10.84	58.7
West South Central:				
Arkansas	4,837	3,012	10.87	62.3
Louisiana	7,092	4,029	12.04	56.8
Oklahoma	7,525	4,905	14.65	65.2
Texas	25,130	15,950	13.39	63.5
Mountain:				
Montana	2,007	1,218	15.67	60.7
Idaho	3,761	2,407	29.07	64.0
Wyoming	961	575	16.72	59.8
Colorado	8,928	5,899	27.01	66.1
New Mexico	4,232	2,897	30.05	68.5
Arizona	7,988	5,339	22.36	66.8
Utah	3,206	2,036	21.95	63.5
Nevada	2,761	1,945	39.24	70.4
Pacific:				
Washington	10,710	7,184	19.05	67.1
Oregon	9,516	6,418	24.25	67.4
California	121,080	85,630	40.49	70.7
Alaska	396	271	35.70	68.4
Hawaii	1,769	1,171	19.10	66.2
Other areas:				
Puerto Rico	1,470	855	6.37	58.2
All other areas <sup>3</sup>	646	457	10.59	70.7

<sup>1</sup>Based on data recorded December 1978.

<sup>2</sup>Consists of 50 States and the District of Columbia.

<sup>3</sup>Consists of Guam, Virgin Islands, foreign countries, outlying areas and residence unknown.

Table 2  
Use of Hospital Outpatient Services by the Disabled Excluding ESRD: Covered Charges and Reimbursements, by  
Residence, 1977<sup>1</sup>

(Dollar Amounts in Thousands)

Area of Residence	Covered Charges	Reimbursement		
		Amount	Per Beneficiary	As Percent of Charges
All areas	\$129,367	\$84,294	\$35.76	65.2
United States <sup>2</sup>	129,150	84,161	36.10	65.2
<i>Regions</i>				
Northeast	36,245	23,079	45.27	63.7
North Central	26,709	16,821	30.36	63.0
South	33,553	21,054	24.27	62.7
West	32,643	23,207	58.59	71.1
<i>Divisions</i>				
New England	8,779	5,864	51.71	66.8
Middle Atlantic	27,466	17,215	43.42	62.7
East North Central	20,314	12,708	31.49	62.6
West North Central	6,395	4,113	27.34	64.3
South Atlantic	19,844	12,505	29.12	63.0
East South Central	6,270	3,863	18.90	61.6
West South Central	7,439	4,686	20.05	63.0
Mountain	4,834	3,273	37.60	67.7
Pacific	27,809	19,934	64.51	71.7
<i>States</i>				
New England:				
Maine	770	444	33.82	57.7
New Hampshire	279	173	24.71	62.0
Vermont	365	253	50.08	69.3
Massachusetts	5,176	3,615	69.29	69.8
Rhode Island	655	435	41.00	66.4
Connecticut	1,534	944	37.11	61.5
Middle Atlantic:				
New York	14,927	9,384	50.10	62.9
New Jersey	4,996	3,447	45.99	69.0
Pennsylvania	7,543	4,384	32.67	58.1
East North Central:				
Ohio	5,211	3,326	29.05	63.8
Indiana	2,309	1,484	28.70	64.3
Illinois	4,307	2,807	29.57	65.2
Michigan	6,501	3,938	39.31	60.6
Wisconsin	1,986	1,153	27.28	58.1
West North Central:				
Minnesota	1,694	1,149	38.56	67.8
Iowa	1,038	669	26.52	64.5
Missouri	2,143	1,282	23.08	59.8
North Dakota	164	107	21.69	65.2
South Dakota	141	92	15.79	65.2
Nebraska	461	297	26.46	64.4
Kansas	754	517	28.93	68.6



**Table 2 (Continued)**  
**Use of Hospital Outpatient Services by the Disabled Excluding ESRD: Covered Charges and Reimbursements, by**  
**Residence, 1977<sup>1</sup>**

(Dollar Amounts in Thousands)

Area of Residence	Covered Charges	Reimbursement		
		Amount	Per Beneficiary	As Percent of Charges
South Atlantic:				
Delaware	\$ 245	\$ 153	\$28.17	62.4
Maryland	2,538	1,704	53.60	67.1
District of Columbia	387	244	35.17	63.0
Virginia	2,963	1,989	37.16	67.1
West Virginia	1,166	539	13.96	46.2
North Carolina	2,886	1,656	22.42	57.4
South Carolina	1,326	693	17.03	52.3
Georgia	3,557	2,266	31.71	63.7
Florida	4,776	3,261	30.43	68.3
East South Central:				
Kentucky	1,143	616	12.05	53.9
Tennessee	2,345	1,463	23.39	62.4
Alabama	1,719	1,135	21.47	66.0
Mississippi	1,063	649	17.13	61.1
West South Central:				
Arkansas	967	601	16.12	62.2
Louisiana	1,039	585	11.90	56.3
Oklahoma	1,188	799	23.42	67.3
Texas	4,245	2,701	23.87	63.6
Mountain:				
Montana	318	213	28.33	67.0
Idaho	369	214	26.87	58.0
Wyoming	137	93	37.01	67.9
Colorado	1,272	886	47.96	69.7
New Mexico	522	341	27.67	65.3
Arizona	1,351	939	38.37	69.5
Utah	388	248	32.35	63.9
Nevada	477	339	55.34	71.1
Pacific:				
Washington	1,417	960	26.68	67.7
Oregon	1,291	892	34.70	69.1
California	24,670	17,791	73.91	72.1
Alaska	42	28	27.29	66.7
Hawaii	389	263	47.03	67.6
Other areas:				
Puerto Rico	201	122	5.27	60.7
All other areas <sup>3</sup>	16	11	5.64	66.5

<sup>1</sup>Based on data recorded December 1978.

<sup>2</sup>Consists of 50 States and the District of Columbia.

<sup>3</sup>Consists of Guam, Virgin Islands, foreign countries, outlying areas and residence unknown.

**Table B**  
**Use of Hospital Outpatient Services by the Aged and Disabled: Enrollment, Charges, and Reimbursement by Region, 1977**

Region	SMI Enrollment Percent	Charges		Reimbursement	
		Percent	Ratio <sup>1</sup>	Percent	Ratio <sup>1</sup>
Aged					
United States	100.0	100.0	100	100.0	100
Northeast	24.6	32.6	133	32.2	131
North Central	27.2	24.5	90	23.4	86
South	31.8	22.1	69	21.6	68
West	16.3	20.8	128	22.8	140
Disabled Excluding End-stage Renal Disease					
United States	100.0	100.0	100	100.0	100
Northeast	21.9	28.1	128	27.4	125
North Central	23.8	20.7	87	20.0	84
South	37.2	26.0	70	25.0	67
West	17.0	25.3	147	27.6	162

<sup>1</sup>Ratio of region to United States.

**Table 3**  
**Approximate Standard Error of Estimated Charges and Reimbursement for Aged, Disabled, and ESRD Beneficiaries**  
**(68 Chances out of 100)**

Estimated Charges or Reimbursements	Standard Error	
	Aged and Disabled	ESRD
\$ 1,000	\$ 970	NA
3,000	2,900	NA
5,000	4,900	NA
10,000	9,700	NA
30,000	17,000	NA
50,000	23,000	NA
100,000	33,000	NA
300,000	59,000	260,000
500,000	78,000	330,000
1,000,000	110,000	480,000
3,000,000	220,000	870,000
5,000,000	290,000	1,200,000
10,000,000	450,000	1,700,000
30,000,000	880,000	3,100,000
50,000,000	1,200,000	4,000,000
100,000,000	1,800,000	5,600,000
300,000,000	3,000,000	8,400,000
500,000,000	3,000,000	NA

**Table 4**  
**Approximate Standard Error of Estimated Reimbursement as a Percent of Charges for Aged and Disabled Beneficiaries**  
**(68 Chances out of 100)**

Amount of Charges in Base (in Thousands)	Reimbursement as a Percent of Charges			
	40%	50%	60%	70%
\$ 50	10.0	9.6	8.6	7.6
100	7.3	6.7	6.0	5.3
300	4.1	3.8	3.4	3.1
500	3.2	2.9	2.6	2.4
1,000	2.2	2.0	1.8	1.7
3,000	1.2	1.1	1.0	.98
5,000	.91	.86	.81	.77
10,000	.63	.59	.57	.55
30,000	.48	.47	.45	.44
50,000	.45	.43	.41	.36
100,000	.34	.32	.30	.27
300,000	.25	.23	.21	.18
500,000	.17	.16	.14	.13

# Health Care Financing Notes

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*Patricia Roberts Harris, Secretary*

**Health Care Financing Administration**

*Leonard D. Schaeffer, Administrator*

**Office of Research, Demonstrations, and  
Statistics**

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